

Remarks

This Amendment is in response to the final office action mailed December 17, 2010 and accompanies a Request for Continued Examination and a Petition for 3-month Extension of Time, with payment (by credit card authorization) for the associated fees. In the event any additional fees are due, kindly charge the cost thereof to our Deposit Account No. 13-2855.

Status of the Claims

Claims 1-9, 12-16 and 25 are pending in the application, with claims 12 and 16 withdrawn. Claims 10, 11, 15, and 17-24 are canceled. Claims 1-9, 13, 14, and 25 are amended, as explained in greater detail below. These amendments are supported by the specification and claims as originally filed and do not add any new matter.

Response to 35 USC § 103 Rejections

Claims 1-7, 9-11, 13, 17-22, and 24-25 were rejected under 35 USC § 103(a) as allegedly unpatentable over Inui, US Patent No. 5,980,142 (“Inui”) in view of Sims et al., US Patent No. 6,380,965 (“Sims”).

Claims 8, 14, and 23 were rejected under 35 USC § 103(a) as allegedly unpatentable over Inui in view of Sims and further in view of Vleurinck et al., US 2004/0036915 (“Vleurinck”).

Claim 15 was rejected under 35 USC § 103(a) as allegedly unpatentable over Sims in view of Petteruti et al., US Patent No. 5,267,800.

Claim 1 is amended to read as a combination of a printer and a supply of image receiving material. This amendment is supported by claim 10. Claim 1 is also amended to recite the feature of the image receiving material comprising die cut labels, which is supported by original claim 11. Additionally, claim 1 is amended to recite “said backing material further comprising at least one registration mark at a location between consecutive labels” and “and a detector for detecting the presence of said registration mark”. These amendments are supported by the final paragraph of page 11 of the description and Fig. 1.

The final clause of claim 1 is amended as follows:

a device for determining ~~at least one of~~ a spacing between two markings and a width of a marking, comparing the determined marking width and ~~and~~ spacing with a respective reference value and for causing the printing to be stopped if, as said image receiving material is being pulled from the supply and is moving past said printhead, ~~at least one of the~~ determined spacing ~~and~~ or width differs from the respective reference value by more than a predetermined amount.

Similar amendments are made to claim 13.

Inui discloses a thermal printer with a jam detection device. In Inui, the printer uses markings to calculate the speed with which recording material is being fed through the printer. If a time between the detection of consecutive indicator marks is greater than a predetermined jam detection time T_J then a jam detection signal is sent to the system controller and the system controller stops transporting the recording material and driving the thermal head (*see* Abstract, lines 51 to 62 of column 1, and lines 24 to 45 of column 5 of Inui).

Sims discloses a printer in which the speed at which print paper is moving through the printer can be detected by detecting markings on the tape. The printing speed is then varied based upon this detected tape transport speed.

It is respectfully submitted that, alone or in combination with one another, neither Inui nor Sims discloses the feature of image receiving material that comprises die cut labels, as recited in Applicant's claims 1 and 13, as amended. In Inui (*see* Figure 3) the image receiving medium 10 comprises recording area PA. However, it is not disclosed that this recording area comprises a die cut label. In fact, lines 33 to 35 of column 7 of Inui state "the positioning marks may be utilized for cutting the *continuous* recording material into individual sheets after the image printing" (emphasis added). Sims also fails to disclose die cut labels. *See* lines 58 to 63 of column 9 of Sims which states, "The first cassette 20 holds a supply spool 36 of image receiving tape 38. The image receiving tape 38 comprises a *continuous* upper layer for receiving a printed image on one of its surfaces and has its other surface coated with an adhesive layer to which is secured a continuous releasable backing layer" (emphasis added). Since neither of Inui or Sims show the feature of die cut labels, it is respectfully submitted that even if Inui were modified or combined with Sims as proposed in the Office action, the result would not satisfy Applicant's claim 1 or 13, as amended.

Claim 1, as amended, also recites the feature of "said backing material further comprising at least one registration mark at a location between consecutive labels". In other words, the supply of image receiving material has a registration mark *in addition to the regularly spaced markings*. This differs from Inui, in which there is shown only one row of markings 39 (*see* Figure 3 of Inui).

Sims also only shows one type of marking 70 (see Figure 4 of Sims). Since in Inui the positioning marks 39 perform the dual function of providing positioning information regarding the printable areas (see lines 45 to 48 of column 3 of Inui) as well as for detecting jamming (see lines 65 to 67 of column 3 of Inui), it is respectfully submitted that a person of ordinary skill in the art would not be motivated to add another row of markings to the system disclosed in the Inui reference.

Claim 1 also now recites that the printer determines “a spacing between two markings and a width of a marking”, and to stop printing if “the determined spacing or width differs from the respective reference value by more than a predetermined amount”. In other words both the width of each marking and the spacing between consecutive markings is recorded, and printing is stopped if either of these values falls outside its respective value by more than a predetermined amount. This differs from Inui in which only the time between consecutive markings is recorded. Likewise, Sims only detects a spacing between consecutive markings (see lines 44 to 63 of column 11 of Sims), and furthermore does not disclose stopping printing if this value falls outside a reference value. Since neither of these documents disclose “determining a spacing between two markings and a width of a marking”, then even if combined as proposed in the Office action, the result would not satisfy claims 1 or 13, as amended.

Furthermore, there are various advantages associated with the features in the scope of Applicant’s claims. Among them, having separate jam detection and registration marks means that the positioning of the jam detection marks can be independent from the positioning of the printing areas on the front-side of the image receiving material. Therefore, in embodiments within the scope of the present claims the jam detection marks can be

applied to the image receiving material without having to take the positioning of the die-cut labels into account. This simplifies the manufacturing process of the image receiving material.

Furthermore, embodiments in the scope of the present claims enable different label supplies with different sized die-cut labels to use the same spacing for the jam detection markings (since those markings are not required for determining the start of a die-cut label), which again simplifies the manufacturing process. This contrasts with Inui, alone or combined (or modified by) Sims, in which the spacing between jam detection/positioning marks 39 will differ dependent upon the size of the printable area.

There is a further advantage associated with stopping printing when either of the determined spacing or width of a marking differs from the respective reference value by more than a predetermined amount. This is because the width of the markings is relatively short compared to the distance between consecutive markings. In embodiments in the scope of the present claims, if the printer realizes that the width of a marking is outside the reference value, then printing can be stopped immediately without having to wait until the next mark has been read. This results in a faster determination of whether a jam condition has occurred, and therefore may reduce the chances of damage to the printer and/or supply medium. Thus it is advantageous to determine the width of each marking as well as the spacing between two markings.

It is respectfully submitted that amended claims 1 and 13 are patentably distinguishable over the cited prior art, and withdrawal of the rejection is respectfully requested. Claims 2-9, 12, and 25 depend from amended claim 1. Claim 14 depends from

amended claim 13. These dependent claims have also been amended in a manner consistent with the amendments to claims 1 and 13. As these claims depend from allowable claims, these dependent claims are likewise respectfully submitted to be in condition for allowance, and withdrawal of all rejections thereto is respectfully solicited.

In view of the cancellation of claim 15, the rejection of claim 5 based on Sims in view of Petteruti et al. is considered moot.

In view of the above amendments and remarks, Applicant respectfully submits the pending claims of the application are in condition for allowance.

Dated: June 17, 2011

Respectfully submitted,

By /Jeremy R. Kriegel, Reg. No. 39,257/
Jeremy R. Kriegel
Registration No.: 39,257
MARSHALL, GERSTEIN & BORUN LLP
233 S. Wacker Drive
6300 Willis Tower
Chicago, Illinois 60606-6357
(312) 474-6300
Attorney for Applicant